PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of the existing traffic control signal at the intersection of MD 228 (Berry Road) and Festival Way/Waldorf Marketplace Entrance in Charles County, Maryland. MD 228 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection presently operates in a NEMA five (5) phase, full-traffic-actuated mode. There is exclusive/permissive left turn phases for the east and westbound movements of MD 228. The MD 228 through movements operate concurrently. The Festival Way through movements operate alone

The intersection is to modified to a NEMA six (6) phase full traffic actuated mode. There will be an exclusive/permissive left turn phases for the east and westbound movements of MD 228. The MD 228 through movements will operate concurrently. The Festival Way/ Waldorf Markeplace Entrance will operate concurrently.

Existing cabinet/controller with one (1) additional four-channel rack mounted time delay output loop detector amplifier will be utilized at this intersection.

CONTACT LIST

The contact persons for District #5 are as follows:

Ms. Kim Tran
Assistant District Engineer - Traffic
410-84011003

Mr. Ernest Hodshon
Assistant District Engineer - Utility
410-841-5462

Mr. Chuck E. George
Assistant District Engineer - Maintenance
410-841-5461

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

EQUIPMENT LIST

A. Material to be furnished by S.H.A..
None.

B1. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
2	EA	818	12 in. x 32 ft. steel strain pole.
1	EA	816	Four-channel loop detector amplifier
2	EA	814	8 in, one-way, three section (R,Y,G) adjustable black faced traffic signal head with span wire mounting hardware and tunnel visors.
6	EA	814	12 in., one-way, three section (R,Y,G) adjustable black faced traffic signal head with span wire arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) adjustable black faced traffic signal head with span wire mounting hardware and tunnel visors.
2	EA	814	12 in./8 in., one-way, five section (12 in. YA, GA/ 8 in. R,Y,G) adjustable black faced traffic signal head with span wire mounting hardware and tunnel visors.
4	EA	813	36 in. x 42 in. R 10-12 sign with span wire mounting hardware.
1	EA	813	30 in. x 36 in. R 3-5(R) sign with span wire mounting hardware.
1	EA	813	30 in. x 36 in. R 3-5(L) sign with span wire mounting hardware.
1	EA	813	30 in. x 36 in. R 3-6(L) sign with span wire mounting hardware.
1	EA	813	54 in. x 30 in. R 3-5(2) sign with span wire mounting hardware
1	EA	813	54 in. x 30 in. R 3-5(2) [Mod] sign with span wire mounting hardware.
2	EA	813	16 in. x Var. D-3(1) [Dual Faced] sign with span wire mounting hardware.
2	EA	817	16 in. x Var. D-3(1) sign with span wire mounting hardware.
1	EA	---	Load Switch.
3	EA	---	Micro-loop probe (set of 3) with 750 ft. lead-in cable.
1	EA	806	20 ft. luminaire arm.
1	EA	806	250 W H.P.S. lamp and luminarie.

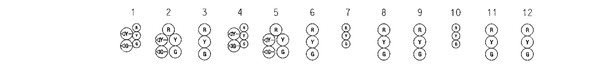
B2. Equipment to be furnished and/or installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic (to include temporary police control).
2	CY	205	Test pit excavation.
6	EA	811	Handhole.
400	LF	815	Sawcut for signal loop detector.
1350	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
1100	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
350	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
140	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1800	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
20	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
650	LF	819	1/4in. steel span wire for tether.
500	LF	819	3/8in. steel span wire.
15	LF	819	1 in. liquid tight flexible non-metalic conduit for loop detector sleeve.
80	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
265	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
75	LF	805	3 in polyvinly chloride [Schedule 80 electrical conduit - bored.
25	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
6.0	CY	801	Concrete foundation for traffic signal equipment.
2	EA	804	Ground rod - 3/4in. diameter x 10 ft. length.
200	LF	556	12 in. wide HAPPTPM - white for crosswalk.
100	LF	556	24 in. wide HAPPTPM - white for stop line.
2	EA	---	Back guy.
Lump Sum	LS	---	Removal of existing pavement marking.
Lump Sum	LS	---	Removal of existing traffic signal equipment
Lump Sum	LS	---	As-built for S.H.A. [on CADD].

C. All other materials to be removed by the contractor shall become the property of the contractor.

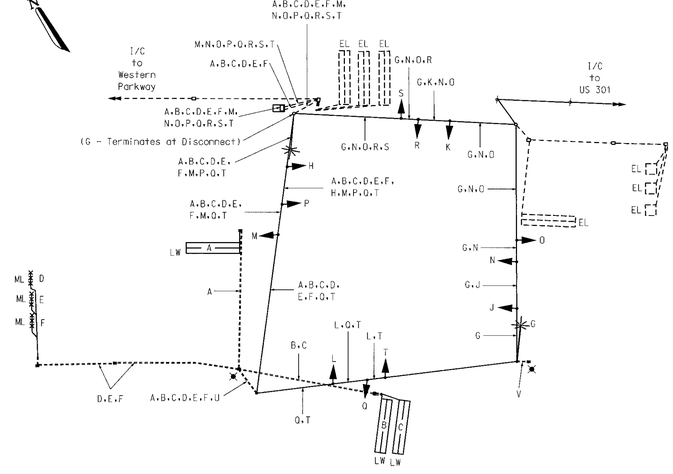
Quantity	Units	Description
2	EA	12 in. 5 section traffic signal head.
2	EA	12 in/8 in 5 section traffic signal head.
4	EA	12 in. 3-section traffic signal head.
10	EA	Span wire mounted sign.
2	EA	Steel strain pole.

Phase Chart



Phase 1 & 5	R ◄G	R ◄G	R	R ◄G	R ◄G	R	R	R	R	R	R	R
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6												
Phase 1 & 6	G ◄G	G ◄G	G	R	R	R	R	R	R	R	R	R
1 Change	G ◄Y	G ◄Y	G	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	G ◄G	G ◄G	G	R	R	R	R	R	R
5 Change	R	R	R	G ◄Y	G ◄Y	G	R	R	R	R	R	R
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



The Traffic Group
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 228 (Berry Road) at Festival Way/ Waldorf Marketplace Entrance

DRAWN BY: Frank Hoeckel	F.A.P. NO. N/A	TS NO. 1346C	SHEET NO. 2 OF 2
CHECKED BY: RW/bs	S.H.A. NO. BW996M82		
SCALE: N/A	COUNTY: Charles County	T.I.M.S. NO. E-472	
DATE: May 6, 2002	LOG MILE: 08022810.60		

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